Figure 1A

```
ATGTCGAAAA TTGAACTAAA ACAACTATCT TTTGCCTATG ATAATCAAGA AGTATTGCTT   60
TTTGATCAGG CAAATATCAC GATGGATACC AATTGGAAAT TAGGATTGAT TGGCCGCAAT  120
GGCCGTGGGA AAACAACCTT ATTAAGATTG TTACAAAAAC AGTTGGATTA CCAAGGAGAG  180
ATTCTTCATC AAGTCGATTT CGTCTATTTT CCACAAACAG TTGCAGAAGA ACAACAGCTC  240
ACTTATTATG TCTTACAAGA GGTGACTTCT TTTGAACAGT GGGAATTAGA ACGAGAATTA  300
ACGCTTTTAA ACGTTGATCC TGAAGTTTTA TGGCGGCCCT TTTCTTCTTT ATCAGGCGGC  360
GAAAAGACGA AAGTTTTATT AGGTCTTCTT TTTATTGAAG AAAATGCCTT TCCTTTAATT  420
GACGAGCCAA CAAATCATTT AGATCTAGCT GGCAGACAAC AAGTGGCTGA ATATTTGAAG  480
AAAAAGAAAC ACGGGTTTAT TTTAGTCAGC CACGATCGGG CATTTGTTGA TGAAGTGGTT  540
GATCATATTT TGGCGATTGA AAAAAGTCAA TTGACGCTGT ATCAAGGGAA TTTTTCTATT  600
TATGAAGAGC AAAAAAAATT AAGAGATGCT TTTGAACTAG CAGAAAATGA AAAAATCAAA  660
AAAGAAGTCA ATCGCTTGAA AGAAACCGCT CGTAAAAAAG CGGAATGGTC GATGAACCGT  720
GAAGGTGATA AGTACGGCAA CGCTAAGGAA AAAGGGAGCG GGGCGATTTT TGATACAGGA  780
GCCATTGGTG CCCGGGCAGC GCGCGTAATG AAGCGCTCGA AACACATTCA ACAACGCGCC  840
GAAACACAAT TAGCAGAAAA AGAAAAACTA TTAAAAGATC TTGAGTATAT TGATCCTTTG  900
TCAATGGATT ATCAGCCAAC GCATCACAAA ACATTATTGA CGGTGGAAGA GCTTCGTCTA  960
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Figure 1B

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GGCTACGAGA AAAATTGGCT ATTTGCGCCA CTTTCTTTTT CAATAAACGC GGGAGAAATT   1020
GTTGGAATAA CAGGGAAAAA TGGCTCAGGA AAATCGAGCT TAATTCAGTA TTTATTGGAT   1080
AATTTTTCTG GGGATTCAGA AGGCGAAGCC ACTTTGGCTC ACCAATTAAC CATTTCTTAT   1140
GTGCGCCAAG ATTATGAAGA CAATCAAGGA ACTTTATCCG AATTTGCAGA GAAAAATCAG   1200
TTAGATTACA CTCAATTTTT AAATAACTTA CGAAAACTTG GGATGGAGCG CGCCGTTTTC   1260
ACTAATCGAA TTGAACAAAT GAGTATGGGG CAACGGAAAA AAGTCGAAGT AGCCAAATCA   1320
TTGTCTCAAT CAGCTGAACT TTATATTTGG GATGAACCCC TTAATTACTT GGATGTATTT   1380
AATCATCAAC AATTAGAAGC GCTAATCTTA TCTGTGAAGC CTGCAATGCT AGTGATTGAG   1440
CATGATGCAC ATTTCATGAA GAAAATAACA GATAAAAAAA TTGTCTTGAA ATCATAA      1497
```

Figure 2A

MetSerLysIleGluLeuLysGlnLeuSerPheAlaTyrAspAsnGlnGluValLeuLeu 20
PheAspGlnAlaAsnIleThrMetAspThrAsnTrpLysLeuGlyLeuIleGlyArgAsn 40
GlyArgGlyLysThrThrLeuLeuArgLeuLeuGlnLysGlnLeuAspTyrGlnGlyGlu 60
IleLeuHisGlnValAspPheValTyrPheProGlnThrValAlaGluGluGlnGlnLeu 80
ThrTyrTyrValLeuGlnGluValThrSerPheGluGlnTrpGluLeuGluArgGluLeu 100
ThrLeuLeuAsnValAspProGluValLeuTrpArgProPheSerSerLeuSerGlyGly 120
GluLysThrLysValLeuLeuGlyLeuLeuPheIleGluGluAsnAlaPheProLeuIle 140
AspGluProThrAsnHisLeuAspLeuAlaGlyArgGlnGlnValAlaGluTyrLeuLys 160
LysLysLysHisGlyPheIleLeuValSerHisAspArgAlaPheValAspGluValVal 180
AspHisIleLeuAlaIleGluLysSerGlnLeuThrLeuTyrGlnGlyAsnPheSerIle 200
TyrGluGluGlnLysLysLeuArgAspAlaPheGluLeuAlaGluAsnGluLysIleLys 220
LysGluValAsnArgLeuLysGluThrAlaArgLysLysAlaGluTrpSerMetAsnArg 240
GluGlyAspLysTyrGlyAsnAlaLysGluLysGlySerGlyAlaIlePheAspThrGly 260
AlaIleGlyAlaArgAlaAlaArgValMetLysArgSerLysHisIleGlnGlnArgAla 280
GluThrGlnLeuAlaGluLysGluLysLeuLeuLysAspLeuGluTyrIleAspProLeu 300
SerMetAspTyrGlnProThrHisHisLysThrLeuLeuThrValGluGluLeuArgLeu 320

Figure 2B

GlyTyrGluLysAsnTrpLeuPheAlaProLeuSerPheSerIleAsnAlaGlyGluIle 340
ValGlyIleThrGlyLysAsnGlySerGlyLysSerSerLeuIleGlnTyrLeuLeuAsp 360
AsnPheSerGlyAspSerGluGlyGluAlaThrLeuAlaHisGlnLeuThrIleSerTyr 380
ValArgGlnAspTyrGluAspAsnGlnGlyThrLeuSerGluPheAlaGluLysAsnGln 400
LeuAspTyrThrGlnPheLeuAsnAsnLeuArgLysLeuGlyMetGluArgAlaValPhe 420
ThrAsnArgIleGluGlnMetSerMetGlyGlnArgLysLysValGluValAlaLysSer 440
LeuSerGlnSerAlaGluLeuTyrIleTrpAspGluProLeuAsnTyrLeuAspValPhe 460
AsnHisGlnGlnLeuGluAlaLeuIleLeuSerValLysProAlaMetLeuValIleGlu 480
HisAspAlaHisPheMetLysLysIleThrAspLysLysIleValLeuLysSer 498

Figure 3A

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ATGAAAGAGA TCGTAACATT AACAAACGTT AGCTATGAAG TAAAGGATCA AACTGTTTTT    60
AAACATGTAA ACGCCAGTGT TCAGCAAGGA GATATCATTG GGATTATCGG CAAAAACGGC   120
GCTGGGAAAT CTACGTTGCT GCACCTCATT CACAATGACT TAGCCCCTGC ACAGGGTCAA   180
ATCCTTCGGA AGGATATAAA ACTGGCTTTG GTTGAACAGG AAACCGCGGC GTATTCCTTT   240
GCGGATCAGA CACCTGCCGA AAAGAAGTTA CTGGAGAAAT GGCATGTGCC TCTTCGTGAT   300
TTTCATCAGT TAAGCGGCGG TGAAAAACTG AAAGCGCGGC TGGCGAAAGG ACTATCAGAG   360
GATGCAGATC TGCTGCTGTT AGATGAACCG ACAAACCACC TTGATGAAAA AAGCTTGCAA   420
TTTCTCATCC AACAGCTGAA ACATTATAAC GGCACTGTGA TTCTCGTTTC TCACGATCGA   480
TATTTTTTAG ACGAAGCCGC AACAAAAATA TGGTCGCTTG AGGATCAGAC GCTGATTGAA   540
TTCAAAGGGA ATTACTCCGG GTATATGAAG TTCCGGGAGA AGAAAAGACT CACCCAGCAG   600
CGTGAATATG AAAAGCAGCA AAAAATGGTT GAACGGATTG AAGCACAAAT GAATGGGCTC   660
GCTTCTTGGT CGGAAAAAGC CCATGCTCAA TCGACGAAAA AGGAAGGGTT TAAAGAATAT   720
CACCGGGTAA AAGCGAAGCG TACGGATGCC CAGATAAAAT CCAAGCAGAA GCGGCTTGAA   780
AAAGAGCTTG AAAAAGCAAA GGCGGAACCC GTTACCCCAG AATATACAGT CCGCTTTTCA   840
ATCGATACAA CCCACAAAAC AGGAAAACGT TTTTTAGAAG TTCAGAATGT AACAAAAGCG   900
TTTGGAGAAA GGACTCTCTT TAAAAACGCA AACTTTACAA TTCAGCACGG CGAAAAGGTT   960
```

Figure 3B

```
GCGATCATAG GCCCCAATGG CAGCGGAAAA ACGACATTAC TGAACATCAT TCTGGGACAG  1020
GAAACAGCAG AAGGAAGTGT ATGGGTGTCG CCGTCCGCAA ACATCGGCTA TTTAACGCAG  1080
GAGGTGTTTG ATTTGCCTTT AGAACAAACA CCGGAAGAGT TATTTGAGAA TGAAACATTC  1140
AAAGCAAGGG GGCACGTTCA AAATCTGATG AGGCACTTAG GTTTTACAGC CGCCCAATGG  1200
ACTGAACCGA TCAAGCATAT GAGTATGGGT GAGCGTGTAA AGATCAAGCT GATGGCATAT  1260
ATTCTGGAGG AAAAAGACGT GCTGATTTTA GATGAGCCGA CAAACCATCT CGACCTGCCG  1320
TCACGCGAAC AGCTGGAAGA AACACTGTCA CAATACAGCG GCACATTGCT GGCGGTTTCA  1380
CATGACCGAT ACTTTCTCGA AAAAACAACA AACAGTAAAC TCGTCATCTC AAACAACGGC  1440
ATCGAAAAGC AGTTAAACGA CGTTCCTTCA GAAAGAAATG AGCGGGAGGA GCTTCGGTTA  1500
AAGCTTGAGA CAGAAAGACA AGAAGTGCTG GGAAAGCTCA GTTTTATGAC GCCAAATGAT  1560
AAAGGGTATA AGGAGCTTGA TCAGGCTTTC AATGAGCTTA CGAAACGAAT AAAAGAGCTG  1620
GATCATCAAG ACAAAAAAGA CTGA                                         1644
```

Figure 4A

MetLysGluIleValThrLeuThrAsnValSerTyrGluValLysAspGlnThrValPhe 20
LysHisValAsnAlaSerValGlnGlnGlyAspIleIleGlyIleIleGlyLysAsnGly 40
AlaGlyLysSerThrLeuLeuHisLeuIleHisAsnAspLeuAlaProAlaGlnGlyGln 60
IleLeuArgLysAspIleLysLeuAlaLeuValGluGlnGluThrAlaAlaTyrSerPhe 80
AlaAspGlnThrProAlaGluLysLysLeuLeuGluLysTrpHisValProLeuArgAsp 100
PheHisGlnLeuSerGlyGlyGluLysLeuLysAlaArgLeuAlaLysGlyLeuSerGlu 120
AspAlaAspLeuLeuLeuLeuAspGluProThrAsnHisLeuAspGluLysSerLeuGln 140
PheLeuIleGlnGlnLeuLysHisTyrAsnGlyThrValIleLeuValSerHisAspArg 160
TyrPheLeuAspGluAlaAlaThrLysIleTrpSerLeuGluAspGlnThrLeuIleGlu 180
PheLysGlyAsnTyrSerGlyTyrMetLysPheArgGluLysLysArgLeuThrGlnGln 200
ArgGluTyrGluLysGlnGlnLysMetValGluArgIleGluAlaGlnMetAsnGlyLeu 220
AlaSerTrpSerGluLysAlaHisAlaGlnSerThrLysLysGluGlyPheLysGluTyr 240
HisArgValLysAlaLysArgThrAspAlaGlnIleLysSerLysGlnLysArgLeuGlu 260
LysGluLeuGluLysAlaLysAlaGluProValThrProGluTyrThrValArgPheSer 280
IleAspThrThrHisLysThrGlyLysArgPheLeuGluValGlnAsnValThrLysAla 300
PheGlyGluArgThrLeuPheLysAsnAlaAsnPheThrIleGlnHisGlyGluLysVal 320

Figure 4B

AlaIleIleGlyProAsnGlySerGlyLysThrThrLeuLeuAsnIleIleLeuGlyGln 340
GluThrAlaGluGlySerValTrpValSerProSerAlaAsnIleGlyTyrLeuThrGln 360
GluValPheAspLeuProLeuGluGlnThrProGluGluLeuPheGluAsnGluThrPhe 380
LysAlaArgGlyHisValGlnAsnLeuMetArgHisLeuGlyPheThrAlaAlaGlnTrp 400
ThrGluProIleLysHisMetSerMetGlyGluArgValLysIleLysLeuMetAlaTyr 420
IleLeuGluGluLysAspValLeuIleLeuAspGluProThrAsnHisLeuAspLeuPro 440
SerArgGluGlnLeuGluGluThrLeuSerGlnTyrSerGlyThrLeuLeuAlaValSer 460
HisAspArgTyrPheLeuGluLysThrThrAsnSerLysLeuValIleSerAsnAsnGly 480
IleGluLysGlnLeuAsnAspValProSerGluArgAsnGluArgGluGluLeuArgLeu 500
LysLeuGluThrGluArgGlnGluValLeuGlyLysLeuSerPheMetThrProAsnAsp 520
LysGlyTyrLysGluLeuAspGlnAlaPheAsnGluLeuThrLysArgIleLysGluLeu 540
AspHisGlnAspLysLysAsp 547